

IN THE CLAIMS

SWA  
C1  
1(AMENDED) An automatic scan test enable signal assertion system comprising:

a scan test enable trigger sensing component for providing an assertion or deassertion notification when logical values of a trigger signal captured at multiple stages provide an indication to begin a scan test enable signal assertion or deassertion; and

B1  
a staging component coupled to said scan test enable trigger sensing component, said staging component for advancing said logical values of said trigger signal through a plurality of stages in accordance with a progression signal and issuing an asserted or deasserted scan test enable signal based upon said assertion or deassertion notification from said scan test enable trigger sensing component.

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11(AMENDED) An automatic scan test enable signal activation system comprising:

a scan test enable signal assertion system for automatically asserting or deasserting a scan test enable signal in response to transitions in a trigger signal and stage progression signal;

B2  
a mutliplexer (MUX) coupled to said automatic scan test enable signal assertion system, said multiplexer facilitates transmission of signals depending upon the assertion of a scan test enable signal;

a functional component coupled to said multiplexer, said functional component performs normal operations of an ASIC or printed circuit board;

an input port coupled to said functional component, said input port functions as input connections that communicate signals to said ASIC or said printed circuit board;

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C1

a NAND gate coupled to said input port, said NAND gate for capturing information from said input port; and

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a test data output port coupled to said multiplexer, said test data output port for communicating test data off of said ASIC or said printed circuit board from either said functional component or said input port.

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15(TWICE AMENDED) An automatic scan test enable signal assertion method comprising the steps of:

B3

- a) transitioning logical values of a trigger signal;
  - b) asserting a scan test enable signal based upon logical values in said trigger signal;
  - c) suspending transitions in a stage progression signal;
  - d) deasserting said scan test enable signal if a transition occurs in said stage progression signal; and
  - e) utilizing a normal functional pin to communicate said trigger signal.
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